Replaced by D134

CLAIMS:-

1. A network linking a plurality of premises (142), comprising:

a section of broadband telecommunications network (130), and

a plurality of electrical power cables (134) each connected to a respective one of the premises for supplying mains electrical power thereto,

each of said power cables also being connected to the section of broadband telecommunications network so that telecommunications signals are transmissible between the section of broadband telecommunications network and each of said power cables,

wherein a telecommunications signal is transmissible to and/or from said plurality of premises by being transmitted along the section of broadband telecommunications network and also along the respective power cable of each of said premises.

2. A network according to Claim 1 further including satellite receiving means for receiving telecommunications signals from a satellite transmitter, wherein a telecommunications signal is transmissible from said satellite transmitter to said plurality of premises via said satellite receiving means, said section of broadband telecommunications network and said power cables.

3. A network according to Claim 1 or Claim 2 including a plurality of interface units, each of said interface units connecting one of said power cables to said section of broadband telecommunications network, each of said interface units including high pass filter means for allowing high frequency telecommunications signals to pass between said section of broadband telecommunications network and said power cable, and for preventing low frequency mains electrical power signals from passing therebetween.

4. A network according to any one of the above claims wherein said electrical power cables are entirely external to said plurality of premises.

5. A network according to any one of the above claims wherein said section of broadband telecommunications network includes any or all of fibre optic, twisted pair or co-axial cable.

6. A method of transmitting a telecommunications signal between a pair of buildings, including the steps of:

(I) transmitting the signal from a first building along an external power cable for supplying mains power to the first building, followed by

(ii) transmitting the signal along a section of broadband telecommunications network, followed by

(iii) transmitting the signal along a second external power cable for supplying mains electrical power to the second building.

7. A method of transmitting a telecommunications signal according to Claim 6 wherein the carrier frequency of said telecommunications signal is at least 1MHz.

8. A network substantially as herein described with reference to Figure 13 of the accompanying drawings.

9. An electricity distribution and/or power transmission network having a number of phases, said number being chosen from the list 1,2,4,5,6,7,8,9, ...n (where n is an integer greater than 9) and including input means for the input of a telecommunications signal having a carrier frequency greater than approximately 1MHz onto at least one of the phase conductors of the network and output means for removing said telecommunications signal from at least one other phase conductor of the network.

10. An unbalanced electricity distribution and/or power transmission network at least a part of which comprises a clad cable, the network including input means for the input onto the network of a telecommunications signal having a carrier frequency greater than approximately 1MHz and output means for removing said telecommunications signal from the network, said signal being transmissible along said part of the network having clad cable.

11. A trunk and branch multipoint electricity

distribution and/or power transmission network including input means for the input onto the network of a telecommunications signal having a carrier frequency greater than approximately 1MHz and output means for removing said telecommunications signal from the network.

12. An electricity distribution and/or power transmission network at least part of which is external to a building, the network including input means for the input onto the network of a telecommunications signal having a carrier frequency greater than approximately 1MHz and output means for removing said telecommunications signal from the network, said signal being transmissible along said external part of the network.

13. A method of signal transmission including input of a telecommunications signal having a carrier frequency of greater than approximately 1MHz onto at least one phase conductor of an electricity power distribution and/or transmission network, and subsequent reception of the signal from at least one other phase conductor of the network, said network having a number of phases, said number being chosen from the list 1,2,4,5,6,7,8,9, ...n (where n is an integer greater than 9)